

5   **What is claimed is:**

1   A digital content creator for inserting electronic  
watermarked data into a digital content, said electronic  
watermarked data in which a URL (Uniform Resource Locator)  
of a Web site providing advertisement information is  
10   described.

2   The digital content creator defined in claim 1, wherein  
said digital content comprises an advertisement image.

15   **3** A digital content creator comprising:

        a discrete cosine converter for subjecting a digital  
content to discrete cosine conversion and thus creating a  
DCT coefficient; and

        a data inserter for inserting electronic watermarked  
20   data into said DCT coefficient;

        said electronic watermarked data in which a URL (Uniform  
Resource Locator) of a Web site providing advertisement  
information is described.

25   **4** The digital content creator defined in Claim 2, wherein  
said digital content comprises an advertisement image.

5   A digital content creator for inserting electronic  
watermarked data into a digital content, said electronic

5   watermarked data in which a URL (Uniform Resource Locator)  
of a Web site providing advertisement information is  
described, said digital content creator comprising:

an inserter for inserting said electronic watermarked  
data into said digital content.

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**6** The digital content reproducer defined in claim 5,  
wherein said digital content comprises an advertisement  
image.

15   **7** A digital content creator comprising:

a discrete cosine converter for subjecting a digital  
content to discrete cosine conversion and thus creating a  
DCT coefficient; and

a data inserter for inserting electronic watermarked  
20   data into said DCT coefficient;

said electronic watermarked data in which a URL (Uniform  
Resource Locator) of a Web site providing advertisement  
information is described; and

an inserter for inserting said electronic watermarked  
25   data into said digital content.

**8** The digital content reproducer defined in claim 7,  
wherein said digital content comprises an advertisement  
image.

9 A digital content reproducer that detects electronic  
watermarked data inserted in a digital content and then  
manifests said digital content on a display, wherein a Web  
site supplying advertisement information is accessed based  
10 on a value of said electronic watermarked data to receive  
said advertisement information, said advertisement  
information being manifested on said display.

10 The digital content reproducer defined in claim 9,  
15 wherein said digital content comprises an advertisement  
image.

11 A digital content reproducer comprising:  
a decoder for extracting a DCT coefficient from a  
20 digital content into which electronic watermarked data is  
inserted;  
a detector for detecting said electronic watermarked  
data inserted into said DCT coefficient; and  
a display for subjecting said DCT coefficient to inverse  
25 discrete conversion and reproducing said digital content;  
wherein said display receives said advertisement  
information by accessing a Web site supplying advertisement  
information based on said electronic watermarked data and  
manifests said advertisement information on said display.

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**12** The digital content reproducer defined in claim 11,  
wherein said digital content comprises an advertisement  
image.

10 **13** An advertisement information distribution system  
comprising:

a communication line;

a digital content reproducer and an advertisement site  
which are interconnected to said communication line; and

15 a digital content creator;

said digital content creator having means for inserting  
electronic watermarked data into a digital content;

said digital content reproducer having means for  
detecting electronic watermarked data from a digital  
20 content into which electronic watermarked data is inserted;  
means for reading out advertisement information from an  
advertisement site specified by a value of electronic  
watermarked data through said communication line; means for  
reproducing digital contents; and means for displaying a  
25 reproduced digital content and said advertisement  
information;

said advertisement site having means for distributing  
goods or services.

5   **14** The advertisement information distribution system  
defined in Claim 13, wherein said communication line  
comprises the Internet.

10   **15** The advertisement information distribution system  
defined in Claim 14, wherein a URL of a Web site supplying  
advertisement information is described to said electronic  
watermarked data.

15   **16** The advertisement information distribution system  
defined in Claim 13, wherein said digital content comprises  
an advertisement image.

20   **17** A digital content creation method wherein electronic  
watermarked data is inserted into a digital content, said  
electronic watermarked data in which a URL of a Web site  
supplying advertisement information is described.

25   **18** The digital content creation method defined in Claim 17,  
wherein said digital content comprises an advertisement  
image.

**19** A digital content creation method comprising the steps  
of:

creating a DCT coefficient by subjecting a digital

5 content to discrete cosine conversion; and

inserting electronic watermarked data into said DCT  
coefficient;

said electronic watermarked data in which a URL of a Web  
site supplying advertisement information is described.

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**20** The digital content creation method defined in Claim 19,  
wherein said digital content comprises an advertisement  
image.

15 **21** A digital content reproduction method, wherein  
electronic watermarked data inserted into a digital content  
is detected and said digital content is manifested on a  
display, comprising the steps of:

receiving said advertisement information by accessing a  
20 Web site supplying advertisement information based on a  
value of said electronic watermarked data; and

manifesting said advertisement information on said  
display.

25 **22** The digital content reproduction method defined in  
Claim 21, wherein said digital content comprises an  
advertisement image.

**23** A digital content reproduction method comprising the

5 steps of:

extracting a DCT coefficient from a digital content into which electronic watermarked data is inserted;

detecting said electronic watermarked data inserted into said DCT coefficient;

10 subjecting said DCT coefficient to inverse discrete cosine conversion and then reproducing said digital content;

displaying said reproduced digital content;

receiving said advertisement information by accessing a  
15 Web site supplying advertisement information based on a value of said electronic watermarked data; and  
displaying said advertisement information.

**24** The digital content reproduction method defined in  
20 Claim 23, wherein said digital content comprises an advertisement image.

**25** An advertisement information distribution method comprising the steps of:

25 inserting electronic watermarked data into a digital content;

outputting the digital content into which said electronic watermarked data is inserted;

extracting electronic watermarked data from the digital

5 content into which said electronic watermarked data is  
inserted;

reading out the advertisement information from a Web  
site specified by a value of said electronic watermarked  
data; and

10 displaying said digital content and said advertisement  
information.

**26** The advertisement information distribution method  
defined in Claim 25, wherein a URL of said Web site  
15 supplying advertisement information is described to said  
electronic watermarked data.

**27** The advertisement information distribution method  
defined in Claim 25, wherein said digital content comprises  
20 an advertisement image.

**28** A computer readable recording medium on which a program  
is recorded, said program making a computer execute the  
step of creating a DCT coefficient by discrete-cosine  
25 converting a digital content and the step of inserting  
electronic watermarked data into said DCT coefficient;

an URL of a Web site supplying advertisement information  
being described to said electronic watermarked data.



5   **29** The recording medium defined in Claim 28, wherein said digital content comprises an advertisement image.

10   **30** A computer readable recording medium on which a program is recorded, said program making a computer execute the step of extracting a DCT coefficient from a digital content into which electronic watermarked data is inserted, the step of detecting said electronic watermarked data inserted into said DCT coefficient, the step of inverse-discrete-cosine converting said DCT coefficient to reproduce a  
15 digital content, and the step of displaying the reproduced digital content, said computer storing a program for executing the steps of receiving said advertisement information by accessing the web site based on a value of said electronic watermarked data and displaying said  
20 advertisement information.

**31** The recording medium defined in Claim 30, wherein said digital content comprises an advertisement image.